

Sac Metro Fire District

Plan Submittal Requirements for Architectural Plans

I Purpose

To advise architects, engineers and contractors what minimum information is required for plan review approval. All required information listed below shall be on the plans.

II Scope

The following requirements shall apply to all new building, tenant improvement, and building addition plans submitted to Sac Metro Fire District. Not all requirements listed apply to every submittal. If questions arise, contact the District plan reviewer to determine what information may not be required.

III References

FPS is in reference to Sac Metro *Fire Prevention Standards*, which are locally adopted standards. Copies of FPS's are available upon request.

CBC and CFC are in reference to the 1998 California Building Code and 1998 California Fire Code.

III General

- A. Plans will not be accepted for review until the plan review fee is paid in full. Fees include the initial review and one resubmittal. Additional resubmittals necessary for approval require additional fees.
- B. The District's plan review turn around time is approximately 30 working days.
- C. Plans may be "expedited" for an additional fee. Expedited plans are guaranteed a 10 working day turn around time. Please see FPS 441.106 for information and requirements for expedited plans.
- D. All submittals shall be wet stamped by the appropriate architect or engineer of record with the following exceptions:
 - 1. Any person conforming substantially to conventional framing requirements of UBC Chapter 23 and Sacramento County Building Department approved framing charts may prepare the following types of residential work:
 - a. Multi-family dwellings not more than two stories plus basement in height, having not more than four attached dwellings, and not more than four dwellings per lot,

including not more than four attached row house dwelling units on separate lots.

2. An unlicensed Certified Interior Designer or equally qualified unlicensed person may prepare plans and specifications for the following types of commercial interior additions, alterations, or tenant improvements:
 - a. Tenant spaces that are classified only as B and M occupancies,
 - b. Spaces where area separation walls and horizontal exits are not required,
 - c. Spaces in the building that are not being converted from residential use,
 - d. Tenant spaces that are not within historical buildings.
3. Any unlicensed person may prepare plans and specifications for the following types of commercial interior additions, alterations, or tenant improvements in accordance with the provisions of the California Business & Professions Code:
 - a. Tenant spaces that require only one exit based on CBC Table 10-A,
 - b. Tenant spaces that are classified only as B and M occupancies,
 - c. Spaces where area separation walls, occupancy separation walls, and horizontal exits are not required,
 - d. Spaces in the building that are not being converted from residential use,
 - e. Tenant spaces that are not within historical buildings.
- E. A minimum of two complete sets of plans shall be submitted each time plans are submitted or resubmitted.
- F. Approved architectural plans will not be released until fire alarm and fire sprinkler plans are submitted. Deferred approval of these items is not permitted.
- G. For new building submittals not required to have civil plans (sprinklers not required), a letter from the local water purveyor indicating the available fire flow shall be provided. (CFC Appendix III-A)
- H. The following require a separate submittal and additional plan review/inspection fees:
 1. Fire sprinklers
 2. Fire alarm
 3. Perimeter gates and fences - requires concurrent submittal to Sheriff's Dept and Dept. of Transportation.

4. Above ground storage tanks for hazardous materials (including fuels)
 5. Rack storage (racks with top shelves at 8 feet or higher and exceeding 500 square feet of floor area)
 6. High piled storage (greater than 12 feet and exceeding 500 square feet of floor area)
 7. Civil plans
 8. Underground fire service mains (civil plans are not acceptable)
 9. Spray booths
 10. Commercial kitchen hood extinguishing systems.
 11. Special suppression systems (I.E. FM 200 or CO2 systems)
- I. Sac Metro is not a Certified Unified Program Agency (CUPA) and therefore does not review the following submittals:
1. Underground storage tanks (unless installed in a concrete vault)

IV Title Sheet shall include the following information:

- a. Address of project location
- b. Name, address, phone number of architect of record
- c. Location map showing the location of the project site in relation to major streets
- d. Sheet index
- e. Building analysis with the following info:
 1. Occupancy of building (CBC Ch. 3). If building houses more than one occupancy type, list each type.
 2. Occupancy of all adjacent suites if project is a tenant improvement in a building with adjacent suites not part of the scope of work.
 3. Construction type (CBC Ch. 6) If project is an addition, note the construction type of the existing and the new building.
 4. Square feet. If this is an addition, note the square feet of the existing, the new, and the total of existing and new. (CBC Table 5-B). Square footage shown on plans shall correlate exactly with square footage entered onto plan review application form.
 5. Number of stories - including number of basement stories. See CBC Ch. 2 for definitions of “story”, “story, first,” and “basement.” Plans shall be labeled according to these definitions.
 6. Building height. (CBC Table 5-B)
 7. Indicate whether or not the building has the following:
 - a. Fire alarm (indicate automatic or manual or both)
 - b. Fire sprinklers

(If any additional fire/life safety features such as standpipes, smoke control, or voice evacuation are provided, indicate so here)

8. If sprinklers are being used to substitute for 1-hr construction or increase the allowable number of stories, indicate so.
 9. Scope of Work – if the project is phased, indicate the scope of each phase. If the project is an addition or tenant improvement, indicate what construction is new, what existing building sections are to remain, and what existing building sections are to be demolished. Provide sufficient information so that plan reviewer can determine what needs to be reviewed.
 10. Mixed occupancy ratio (CBC 504.3)
- f. List of applicable codes and the edition
 - g. For buildings 5,000 square feet and greater, plans shall include a note stating that prior to occupancy the building must be tested by an approved contractor for verification that the building adequately supports the District's handheld radios. See FPS 444.401, *800 MHZ Amplification System* for additional information.

Note: See attached sample building analysis

V Site Plan shall include the following information:

- A. Building footprint
- B. North direction arrow
- C. Location of adjacent streets
- D. Location of adjacent buildings (All adjacent buildings whether or not on the same lot and regardless of size shall be shown)
- E. If adjacent buildings are close enough to be affected by the assumed property line, show the construction type/rating of the exterior walls and the location/type of protection of exterior openings. (CBC Table 5-A)
- F. Location of assumed property line around the **entire** building. This is required even if adjacent buildings are on the same lot and owned by the same person. Assumed property lines are also required for interior courts.

Note: See attached Sample Assumed Property Line diagram

- G. Dimension lines showing the distance from each building to the assumed property line (NOT face of building to face of building)
- H. If side yards are used to increase maximum allowable area, provide dimension lines showing the length of side yards. For purposes of side yards, the entire width of a street may be used. Show area increase calculations on the plans.

VI Architectural sheets shall provide the following info*:

*Some information listed in this section is not necessary for small scale projects. However, when in doubt provide the information on the plans or contact the District plan reviewer to confirm what information is required.

- A. Use of all rooms or areas (CBC Table 10-A)
- B. Square feet of each room or area
- C. Occupant load of each room (CBC 1003.2.2.2)
- D. Exit analysis that includes the following:
 - 1. Occupant load of each room
 - 2. Number of occupants exiting each exit
 - 3. Exit width required for each exit
 - 4. Exit width provided for each exit
 - 5. For corridors and stairwells, provide the number of occupants exiting as well as the required and provided exit width.
 - 6. Path of travel from each exterior exit to a public way. Show that required exit width and a permanently maintained surface are maintained. See CBC 1002 for definition of “public way.” (CBC 1006.1)
- E. Wall legend – differentiate between rated and nonrated walls, new walls, existing to remain walls, and existing to be demolished walls.
- F. Rated walls shall be identified as “rated corridor wall, occupancy separation wall, area separation wall, or horizontal exit wall” as applicable.
- G. Detail/UL design number for all fire rated assemblies including, but not limited to, interior and exterior walls, floor/ceilings, roofs, shafts, head of walls, seismic separations, columns/beams, through penetrations, etc. Every rated wall detail shall have an associated head of wall detail. Wall details shall state whether the wall is full or partial height. (CBC Tables 7A – 7C and US Gypsum assemblies are acceptable alternatives to UL)
- H. Where rated walls and non-rated walls intersect or where walls with different ratings intersect, provide a detail indicating how required fire ratings are maintained at each intersection.
- I. Door schedule that includes:
 - 1. Door and frame construction (indicate presence of louvers or undercuts)
 - 2. Door rating (CBC 713, 1004.3.4.3.2.1, 1005.3.3.5)
 - 3. Door hardware type If this info is in the specifications, please include specifications with submittal. (CBC 1003.3.1.8)
 - 4. If panic hardware is to be installed, clearly state so.
 - 5. Indicate if door is self closing or automatic closing via the fire alarm or an integral smoke detector

- J. Window schedule showing all locations requiring safety glazing. (CBC 2406)
- K. Location of Fire Control Room. See FPS 442.201 for Fire Control Room requirements.
- L. Dimension lines showing maximum travel distance from the furthest occupied location to an exit (see CBC 1004.2.5)
- M. Roof class. (CBC Table 15-A)
- N. Flame spread class for each area (CBC Table 8-A/8-B)
- O. Show location of all hazardous materials storage and amounts. (CBC Tables 3-D/3-E)
- P. Notation of code requirement exceptions. Anytime an exception is utilized to eliminate a code requirement, indicate on plans the code section and exception number and state how the exception is being met.

I.E. “Non-rated corridors are permitted per CBC 1004.3.4.3 exception no. 5. This is an office space in a fully sprinklered building and the occupant load of the office does not exceed 100.”

VII Mechanical Sheets shall provide the following information:

- A. Location of all rated walls.
- B. Location of all ducts, registers, fresh air intakes, fire dampers, and air flows in CFM.
- C. If door undercuts are utilized for air balance, indicate on plans.
- D. Clarify if dampers are smoke dampers, fire dampers, or combination smoke/fire dampers.
- E. Smoke, fire damper installation detail.
- F. Detail/UL design number for firestopping plumbing penetrations in rated assemblies (CBC 714).
- G. CFM of all air handling units supplying air (CMC 608, NFPA 90).
- H. If automatic shutdown of air handling units is required, indicate whether shutdown is via main supply duct detectors or area detection (see CMC 608).

VIII Electrical Sheets shall provide the following information:

- A. Location of all exit signs and the direction of arrows on the signs (CBC 1003.2.8).
- B. Location of all emergency illumination lights or lights connected to an emergency generator, including exterior lights requiring emergency illumination (CBC 1003.2.9.2)
- C. Detail and UL design number for firestopping all conduit penetrations in rated assemblies (CBC 714).
- D. See FPS 442.401 for information required on fire alarm submittals.

- E. Location of fire alarm control panel. (This is always in the Fire Control Room)

IX Plumbing Sheets shall provide the following information:

- A. Detail and UL design number for firestopping all penetrations in rated assemblies (CBC 714).

X Landscape Sheets shall provide the following information:

- A. Location of all trees in relation to fire access lanes (CFC 902.2.2.1).
- B. For trees shown extending over fire access lanes, a note indicating that the tree canopy will be greater than 13 ½ feet high shall be provided (CFC 902.2.2.1).

XI The following apply to **Resubmittals**

- A. All changes shall be clouded and indicated with a delta that has a corresponding revision number and date.
- B. Plan review comments shall be addressed in the column on the plan review letter or in a separate letter specifically addressing plan review comments.
- C. Indicate how the plan review comment was addressed and on what sheet the change or correction was made.
- D. All plan review comments must be addressed in order for plans to be approved. If there are any questions regarding code interpretation or the applicability of the code section cited, contact the District plan reviewer to discuss the issue prior to resubmittal.

EXAMPLE

Building Analysis

Occupancy	B/A2.1
Construction Type	Type V 1-hr
Square feet	Existing 2,500 Addition 1,500
	Total 4,000
No. of stories	2 stories + 1 basement
Building height	25 feet
Fire sprinklers	Yes
Fire alarm	Yes – manual pull stations throughout
Standpipes	None

Scope of Work:

1. Demolition of building section A
2. Interior tenant improvement of building section B
3. No work in building section C
4. Addition of new building section D
5. Reroofing only of section E

Mixed occupancy ratio

$$\frac{\text{Sq. ft of B}}{\text{Sq. ft allowed}} + \frac{\text{Sq. ft. of A2.1}}{\text{Sq. ft allowed}} = \frac{2,500}{14,000} + \frac{1,500}{10,500} = 0.18 + 0.14 = 0.32$$

Applicable Codes:

- 1998 California Building Code
- 1998 California Fire Code
- Sac Metro Fire Prevention Standards
- CCR Title 19
- NFPA 13 1996 Edition